Hearing Help-Seeking Behavior and Patient Readiness for Intervention

Presenter

- Dania Rishiq, Ph.D., Assistant Professor of Audiology
- Department of Speech Pathology and Audiology, University of South Alabama

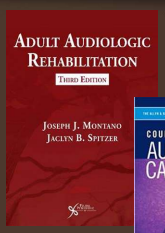
- I declare No conflict of Interest

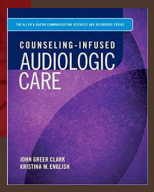
Presentation Objectives

1. Upon completion of this session, the participant will be able to recognize some of the barriers and facilitators of help seeking for hearing loss.
2. Upon completion of this session, the participant will be able to recognize how health behavior models can assist our understanding of help seeking behavior.
3. Upon completion of this session, the participant will be able to recognize how these models can be used to change behavior toward seeking intervention.

Primary References

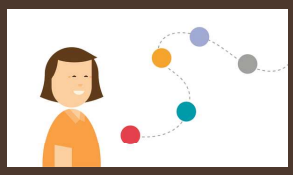
- Joseph J. Montano & Jaclyn B. Spitzer (2021). Adult Audiologic Rehabilitation, 3rd edition, Plural Publishing (ISBN: 9781635501438).
- Counseling-Infused Audiologic Care, John Greer Clark, & Kristina M. English (2014), Pearson.





Patient Journey

- It is often noted that people wait **about 7 - 10 years** between suspecting they have hearing loss and seeking help for their hear difficulties (Davis et al. 2007; Simpson et al. 2018).
- The awareness of hearing loss and the decision to enter the health care system is not immediate; it may evolve over several years.



https://idainstitute.com/tools/a_patient_journey/stages_of_a_patient_journey/

Patient Journey

- Every patient is on a journey.
- The concept of a patient journey is used to describe patients' experiences of living with chronic disease.

Patient Journey

Gregory (2012) describes the stages in a typical journey:

- Pre-awareness
- Awareness
- Movement
- Diagnostics
- Rehabilitation
- Post Clinical

Patient Journey

- **[1] Pre-awareness.**
- Patients experience communication problems but may be managing without acknowledging the hearing problem.
- They may feel frustrated as family and friends begin to mention their concerns.

Patient Journey

- **[2] Awareness.**
- Patient realizes that hearing loss is affecting their social and/or work life.
- They may acknowledge a hearing loss and begin to map the problems it causes.
- They "self-test" (e.g. raise the TV volume).

Patient Journey

- **[3] Movement.**
- Patients reach a "***tipping point***" and are ready to discuss it with a professional.
- They will likely gather information about hearing loss from a variety of sources, including personal networks, a general practitioner, media, and websites.

Patient Journey

- **[4] Diagnostics.**
- Patient actively seek a referral and meet with an audiologist for an interview and case history, hearing test, and recommendations, leading to decision making.
- The decision to move forward heavily depends on whether the audiologist has established a sense of trust with the patient.
  - ✓ Without **trust**, acceptance of the information we provide to patients, and adherence to professional recommendations are compromised.

Patient Journey

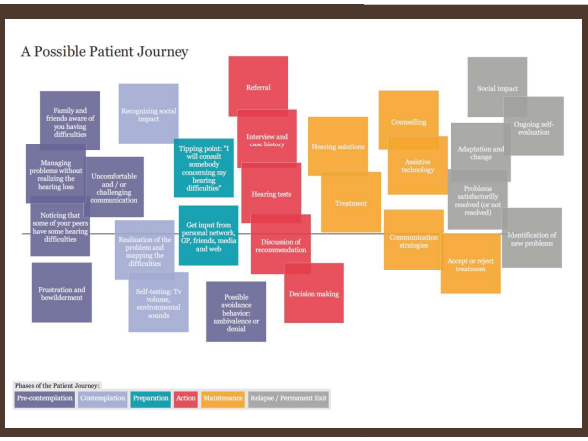
- **[5] Rehabilitation.**
- Patients take action by seeking counseling, treatment, and the fitting of hearing aids (or other solutions).
- If provided full audiologic support, patients will consider other assistive listening devices and develop new communication strategies.

Patient Journey

- **[6] Post-clinical.**
- Patients undergo a process of adaptation and change.
- They observe the social impact of their audiologic management, and continue to self-evaluate the success or failure of the treatment outcome.

Patient Journey

- The **Ida Institute** developed a prototype or "possible journey" of a patient with hearing loss.
- This tool was designed to help clinicians visualize or "map" patients' journeys.
- http://idainstitute.com/toolbox/
- http://idainstitute-001-site3.htempurl.com/



Patient Journey

- The audiologist usually first encounter patients somewhere around the **midpoint** of the journey.
- Much has already happened in a patient's life before we meet!

Hearing Help-Seeking Behavior

- Help seeking behavior is well studied in health psychology.
  - Vision loss
  - Hypertension
  - Diabetes
- **Many models and theories** were proposed to understand the help seeking behavior.
- One of these models, the transtheoretical model (TTM), which is adopted in examining the psychological readiness of patients for hearing rehabilitation.

Transtheoretical Model

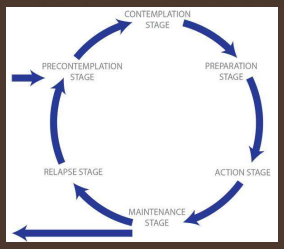
- The focus of this model is that the patient's readiness for change determines whether they will engage in, and maintain a certain health behavior.
- Several studies have shown that the TTM stages-of-change have validity in the audiology setting (e.g. Babeu et al. 2004; Ekberg et al. 2016)
- It assesses patient readiness for change across five key stages.

Transtheoretical Model

- It is proposed that individuals move from being unready for change (**precontemplation**) to a stage at which change is being considered (**contemplation**), leading them to a time during which they prepare for change (**preparation**), until they reach to the point at which behavior change occurs (**action**). That behavior may continue (**maintenance**), or stop (**relapse**). If the latter, the cycle begin again.

Transtheoretical Model

Figure 1. The Stages of Change Model which Describes Help Seeking Behavior of Adults with Age-related Hearing Loss.



https://www.audiologypractices.org/editor-s-message-march-2016

The Circle of Change

- All stages require some form of clinical support.
- The Circle of Change is used to envision the cycle of stages experienced when considering audiologic treatment options (Prochaska and DiClemente,1984b).

Joseph J. Montano & Jaclyn B. Spitzer (2021). Adult Audiologic Rehabilitation, 3rd edition, Plural Publishing.

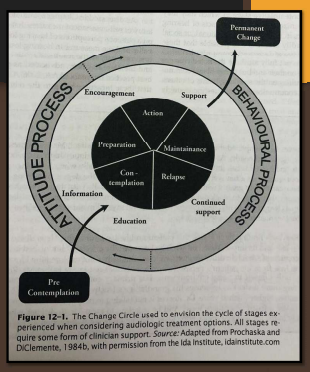


Figure 12–1. The Change Circle used to envision the cycle of stages experienced when considering audiologic treatment options. All stages require some form of clinician support. *Source:* Adapted from Prochaska and DiClemente, 1984b, with permission from the Ida Institute, idainstitute.com

The Circle of Change

- Accurately identifying clients' ambivalence, readiness and stage-of-change will allow for more **individualized**, and client-centered counselling that corresponds with that client's stage in the change process.

Joseph J. Montano & Jaclyn B. Spitzer (2021). Adult Audiologic Rehabilitation, 3rd edition, Plural Publishing.

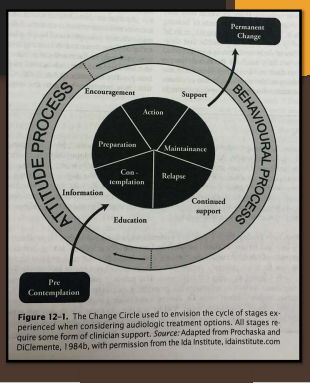


Figure 12–1. The Change Circle used to envision the cycle of stages experienced when considering audiologic treatment options. All stages require some form of clinician support. *Source:* Adapted from Prochaska and DiClemente, 1984b, with permission from the Ida Institute, idainstitute.com

The Circle of Change

- It is a visual reminder that our counseling and treatment options are to be **customized** to meet each patient in his or her current state.

Joseph J. Montano & Jaclyn B. Spitzer (2021). Adult Audiologic Rehabilitation, 3rd edition, Plural Publishing.

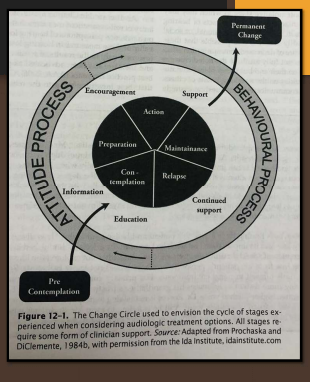


Figure 12–1. The Change Circle used to envision the cycle of stages experienced when considering audiologic treatment options. All stages require some form of clinician support. *Source:* Adapted from Prochaska and DiClemente, 1984b, with permission from the Ida Institute, idainstitute.com

The Circle of Change

- A patient's specific location within the change circle reflects his or her readiness to work with hearing management recommendations and may reveal a need for further information or support prior to reaching a point of action.
- A common clinical mistake is to counter ambivalence with more information. Instead, the audiologist's skills in motivational engagement are required to explore the fears and concerns a patient may still have.

Case Study 12–1

Dr. Reeves has completed the hearing evaluation for his 10:30 patient, Mr. Rodrigues, and is explaining his test results. As he explains the findings of Mr. Rodrigues' high-frequency hearing loss and how this can impact speech understanding especially when listineing in noise, Mr. Rodrigues nods attentively. But when he says, "Actually, the degree of hearing loss we have here can benefit greatly with today's hearing aids, especially with the newer microphone technology that helps to block out some of the bacground noise," he senses a resistance. Mr. Rodrigues leans back in his chair, crosses his arms and says, "I'm not sure I need hearing aids yet. I just wanted to see where things are."

➢Dr. Reeves is finding he is losing this patient and he isn't sure why. He is discussing the hearing loss and its impact based on what he knows of the effects of diminished hearing on the reception of speech in different environments. But he has not explored the impact of the hearing loss from his patient's perspective. What he does not know is that Mr. Rodrigues rarely finds himself in noisy environments. His primary concern is that his grandson is becoming more distant as he senses his grandfather's frustrations when he can't hear the boy's softer, higher-pitched voice. Dr. Reeves is not talking to his patient's concerns or needs as he never learned what these were. And he is failing to meet Mr. Rodrigues where he is: squarely in the transitional preparation stage and not quite ready for action.

Unless explored, the audiologist rarely knows the patient's readiness for change and motivation's level.

Joseph J. Montano & Jaclyn B. Spitzer (2021). Adult Audiologic Rehabilitation, 3rd edition, Plural Publishing.

Motivational Engagement

- It helps audiologists guide patients in:
  - Reflection on the impact of hearing loss.
  - Reflect on their willingness to make necessary changes to address this impact.
  - Reflect on their perceived abilities to make needed changes.

✓To engage our patients and enhance their motivation through **guided self-realization**.

Assessing Perceptions

- Using a **simple scaled line**, the patient can visually rank their perceived importance for change.
- Ranking line links to the patient's own specific difficulties.
- e.g. When the importance ranking is low (> 7): what would it take to bring your ranking from 4 to a 7?

1. How important is it for you to improve your hearing right now?

   0 = not at all ——— 10 = very much

2. How much do you believe in your ability to use hearing aids, assistive listening devices or communication strategies?

   0 = not at all ——— 10 = very much

Figure 2. The Ida Institute Line tools.

Ekberg K, Barr C. Identifying clients' readiness for hearing rehabilitation within initial audiology appointments: a pilot intervention study. Int J Audiol. 2020 Aug;59(8):606-614. doi: 10.1080/14992027.2020.1737885. Epub 2020 Mar 6. PMID: 32141783.

Assessing Perceptions

- Use of **decisional box**
- The process of weighing the pros and cons of taking up a behavior.
- Following use of the decisional box, most patients will find their internal motivation has increased sufficiently to take action.

Benefits of Status Quo	Costs of Status Quo
Potential Costs of Change	**Potential Benefits of Change**

Figure 12–3. The cost-benefit analysis box used to help patients explore and consider their self-reflected advantages and disadvantages of inaction versus action. *Source:* Modeled after Janis and Mann, 1977.

Joseph J. Montano & Jaclyn B. Spitzer (2021). Adult Audiologic Rehabilitation, 3rd edition, Plural Publishing.

Assessing Perceptions

- Such tools (line scale and decisional box) may be useful as a "conversation starter" to draw out patients' potential ambivalent feelings toward audiologic intervention (e.g. hearing aids).
- Audiologists may reflect on patients' interactional responses to the tools' questions, and actively listen for ambivalence within the patient's talk.

✓The influence of others as a determinant of health behaviors.

Health Belief Model (HBM)

- It was developed in the 1950's to understand why people were not taking up free health screenings to detect asymptomatic diseases.
- The current version of the model consists of **6 constructs** that, together, aim to explain and predict help-seeking behavior.
- It suggests that the likelihood an individual will engage in a health behavior is determined by the extent to which they perceive a threat from that health condition.

Health Belief Model (HBM)

- The threat is affected by interplay of 6 factors:
  - **1. Perceived benefits**: the belief that an intervention will lead to positive benefits and consequences.
  - **2. Perceived barriers**: the barriers that an individual believes he or she needs to overcome to effectively conduct some form of intervention, which include costs, negative side effects, social stigma, and time needed.
  - **3. Perceived susceptibility**: the feeling of being vulnerable to a condition and the extent to which the individual believes he or she is at risk of acquiring the condition.

Health Belief Model (HBM)

- The threat is affected by interplay of (*continued*):
  - **4. Perceived severity**: the seriousness of the consequences incurred if affected by the condition belief, both medically and socially; (e.g., effects on family life, personal relations).
  - **5. Perceived self-efficacy**: the individuals confidence in their ability to successfully adopt the intervention.
  - **6. Cues to action**: External influences, such as media, information from health care provider.

TABLE 2. Health belief model: definition of constructs and influences on help seeking for hearing

Factor	Definition	Attitude Likely to Lead to Positive Help-Seeking Behaviors	Explanation
Perceived susceptibility	An individual's assessment of the risk of acquiring a condition	Feeling vulnerable to hearing loss	Individual who feels vulnerable to hearing loss is more likely to seek help for hearing difficulties
Perceived severity	An individual's assessment of the seriousness of the consequences of a condition if it is acquired	Believing that a hearing loss would have negative consequences	Individual is motivated to seek help for hearing
Perceived benefits	An individual's assessment of the positive consequences of adopting a health behavior	Believing that hearing well is important	Individual is motivated to seek help for hearing
Perceived barriers	An individual's assessment of the influences that discourage adoption of a health behavior	Perceiving that acquiring help for hearing loss has few negatives	Individual is more likely to seek help than if he/she perceives many barriers
Perceived self-efficacy	An individual's assessment of his/her ability to successfully adopt a health behavior	Believing one has the knowledge and abilities to acquire help for hearing loss	Individual feels capable of seeking help for hearing
Cues to action	External influences that promote a health behavior (e.g., symptoms, media communications, or information from a healthcare provider)	Receiving prompts from others about hearing loss and hearing interventions	Individual is more aware of the need for, and possible outcomes of, seeking help for hearing

- Saunders, G. H., Chisolm, T. H., & Wallhagen, M. I. (2012). Older adults and hearing help-seeking behaviors.

Questionnaires

- University of Rhode Island Change Assessment (URICA)
  - TTM
- Hearing Beliefs Questionnaire (HBQ)
  - HBM

University of Rhode Island Change Assessment (URICA)

- The URICA (McConnaughy et al. 1983) was originally developed to assess readiness for change associated with addictive behaviors.
- It has been used for assessing TTM constructs specific to hearing health behaviors (Laplante-Lévesque et al. 2013, 2015).

University of Rhode Island Change Assessment (URICA)

- URICA consists of 24-items that assess readiness for change on three 8-item scales: pre-contemplation, contemplation, and action. Each item consists of a statement to which participants respond on a 5-point scale:
- (1) strongly disagree (1 point), (2) disagree (2 points), (3) undecided (3 points), (4) agree (4 points), (5) strongly agree (5 points).

University of Rhode Island Change Assessment (URICA)

- Points obtained on each scale are summed yielding pre-contemplation, contemplation, and action scores that can range from 8 to 40.
- For each scale, a higher score indicates greater agreement with the TTM construct being assessed.

University of Rhode Island Change Assessment (URICA)

- A stage of change can also be assigned based on the scale on which the participant had the highest score.
- If a participant has identical scores on more than one scale, then the stage of change assigned is the stage that is most advanced.
- A copy of the URICA can be found here: http://links.lww.com/EANDH/A248

University of Rhode Island Change Assessment (URICA)

- Participants who scored highly on action were likely to have taken up hearing intervention at six months follow-up whereas those who scored highly on pre-contemplation reported less successful intervention outcomes.
- (Laplante-Levesque, Hickson, and Worrall, 2012)

Application (URICA)

- The content of the intervention and how it would be delivered should presumably differ by stage.
  - **Pre-contemplation stage**: focus on increasing awareness about the impact of hearing loss and the role hearing plays in psychosocial well being.
    - Sources such as general health practitioner, the internet, or public health campaign.

Application (URICA)

- **Preparation stage**: need specific information about local audiology services.
- **Action stage**: it would be important to facilitate appointment scheduling and clinic access.
- **Maintenance stage**: focus on providing follow up rehabilitation, support and counseling.
  - ✓ Maintenance stage is designed to maintain the patient's willingness to work through adjustments and acceptance of audiolgy intervention. The audiologists role is to support and encourage to maintain the successes that have been reached
  - ✓ The long term goal of audiologic rehabilitation is to provide sufficient aftercare for patients so that they never enter the release stage.

Hearing Beliefs Questionnaire (HBQ)

- Hearing Beliefs Questionnaire (HBQ; Saunders et al. 2013) was used to **assess the six constructs of the HBM**:
  - ➔ Perceived susceptibility, perceived severity, perceived benefits, perceived barriers, perceived self-efficacy, and cues to action.
- Each HBQ item consists of a statement to which participants indicate their agreement on an 11-point scale.

Hearing Beliefs Questionnaire (HBQ)

- The scale is anchored at 0 points (completely disagree), 5 points (no opinion), and 10 points (completely agree).
- Points obtained on each scale are summed and divided by the number of items in that scale. Scores on each scale can range from 0 to 10.
- ➔ An individual with a lower score on the barriers scale and higher scores on the susceptibility, severity, benefits, self-efficacy, and cues to action scales will be more likely to engage in a health behavior.

Application (HBQ)

- Intervention could include education to ensure individuals have an accurate perception about the risk of hearing loss from age, noise exposure, to address **perceived susceptibility**.
- Access to simulations of hearing loss to address **perceived severity**.
- Opportunities to experiment with hearing assistive technologies to address **perceived benefits**.

Application (HBQ)

- Correction of misinformation about hearing aids to address some of the **perceived barriers**.
- Information about how, where, and when to get a hearing test, and options for auditory rehabilitation to address **perceived self-efficacy**.
- The use of primary care physician and public health messages to promote awareness about hearing and hearing loss to address **cues to action**.

Why invest in readiness management?

- Why spend the time to examine the patient's help-seeking behavior?
  - It will allow us to provide **customized care** and a deeper level of audiologic rehabilitation.
  - Understanding the mindset of patients, and their families and communication partners will help the professional in meeting the patient on their terms, which will increase the likelihood that the entire process will turn out positively.

Why invest in readiness management?

- Why spend the time to examine the patient's help-seeking behavior?
  - Combined with self assessment measures, sensitive timing, motivational engagement we can positively engage persons with low motivation to embrace hearing management solutions.
  - The upfront time investment will improve patient adherence and save net time.

E-mail: drishiq@southalabama.edu